CENTRAL INTELLIGENCE AGENCY

S-E-C-R-E-T

50X1-HUM

COUNTRY USSR (Tula and Bryansk Oblasts)

REPORT

SUBJECT Plants at Tula and Bryansk with Reported GM Connections; Priborov Plant at Moscow

DATE DISTR. 25 August 1960

NO. PAGES 4

REQUIREMENT NO. RD

REFERENCES

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DATE OF INFO.

PLACE & DATE ACQ.

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SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

1. in the assembly shop of the Tula plant, the cylinders were lifted from cradle to cradle as each assembly process was completed.[1]

2. Inside the cylinder assembly shop of the Tula plant, there were two parallel lines of assembly with four objects on each line, spaced about one m apart from each other. The space between the lines and the outside walls was narrower than that between the two lines themselves, but the distance was such that there was plenty of room between the walls and the assembly lines to allow men to work on the articles. The lines were situated in the center section of the large bay, and there was a considerable amount of empty floor space between the ends of the lines and the end walls of the building. At one end of the shop, there were desks covered with drawings, where Soviet officers sat and worked. There was no other equipment or installations in the shop

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3 the diameter of the cylinders was exactly 77 cms.

4 cylinders were eventually fitted into missiles they were finally sent to the workshop

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STATE	X	ARMY	X	NAVY	X	AIR	X	FBI		AEC		NSA	X	NIC	X

(Note: Washington distribution indicated by "X"; Field distribution by "#".)

5. the pipes were in one piece and not separate top and bottom pipes. The complete pipe component curved round and slightly back on itself at both ends (see sketch on page 4) and the procedure for fitting it to the cylinder was as follows. Firstly, the top cover of the cylinder was inserted over the lower end of the pipe, passed round the lower bend, up the length of the pipe, round the upper bend and down again, until it seated against the flange at the upper end of the pipe. The bottom cover was then fitted to the cylinder and the threaded bottom end of the pipe was inserted into the threaded hole in the center of the bottom cover and screwed into place by moving the whole pipe component round and round the outside of the cylinder. When the bottom end of the pipe had thus been securely screwed into the bottom cover, the top cover was screwed into the top of the cylinder. The grooves inside the cylinder were about two cms wide and ten mm deep The internal surface of the cylinder was finished to a high degree of polish. The grooves inside the cylinder were cut by some sort of lathe-cutting instrument. 50X1-HUM 50X1-HUM

6. the Soviet officers in charge of the final assembly shop at the Tula plant their shoulder boards were gold-colored with royal-blue piping down the center and round the edge. At the top of the shoulder boards there was a pair of crossed propellers in silver. A major wore one star in the center of the shoulder board, a lieutenant colonel two stars side by side at the bottom of the shoulder board at the side of the central blue piping, and a full colonel the same as a lieutenant colonel with an additional third star over the central blue piping towards the top of the shoulder board. two of them referred to as Ivan Ivanovich and Sergey Petrovich. 50X1-HUM 50X1-HUM

7. The cyrillic lettering on the missiles was СП, and this was the same for the factory designation. 50X1-HUM 50X1-HUM

8. dark colored ingots, weighing about five or six kgs each, used to be delivered to the Priborov Plant in railroad cars

9. the secret shop at the Priborov Plant where rough cast cylinders were processed. Blueprints of the cylinders were available in the shop to guide the checkers, but they bore no descriptive title, other than the word "cylinder". the metal of the cylinders similar to, but even brighter in color than, stainless steel. it was easier to work on the lathes than stainless steel. The top and bottom curves were made of the same material. The cylinders seemed to be fairly heavy and were moved on small trucks or by means of overhead pulleys and chains. the cylinders could be moved by two men, who could shift them in short movements but not of course lift them completely off the bench. 50X1-HUM 50X1-HUM 50X1-HUM 50X1-HUM 50X1-HUM

10. After inspection by Soviet officers, the cylinders were shipped away from the Priborov Plant in crates Shipping took place after the end of the day shift and before the workers arrived the following morning, so that the crates could have been marked during the period the workers were not there. 50X1-HUM

11. After being rough-cast in the foundry, the cylinders were sent on to the laboratory, they underwent some sort of test there before being passed on to the secret processing workshop. 50X1-HUM

When they arrived at the latter, they bore a bluish-colored mark cut by acid, which might be on any part of the cylinder. The mark consisted of a circle about the size of a shilling, in the center of which were the cyrillic letters OTK, signifying that the cylinder had been tested and passed by the laboratory.

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12. There were a number of people working on each article within the cylinder assembly shop at the Tula plant. About half of them, however, were apprentices who were studying the work being done. The tempo of the work was leisurely, and the apprentices were allowed plenty of time to examine exactly what the processes were.

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13. The secret processing shop at the Priborov Plant worked one shift from 0800 hours to 1600 hours with a lunch break from 1200 to 1300 hours. There was no night shift. Soviet officers generally remained at the workshop after the end of the shift. The rest of the factory worked three shifts of eight hours each, i.e., 0800 to 1600 hours, 1600 to midnight, and midnight to 0800 hours.

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14. the cylinders were rough-cast in the foundry at the Priborov Plant at the rate of about eight per day. Earthenware moulds were used, the outer being in two parts and the inner a cylindrical solid. The center mould was placed in position vertically and the two outer halves placed round it, after which a red liquid was poured into the space between the two moulds and left to solidify for a period of 36 hours. The two outer halves of the mould were then removed, and the cylinder remained set round the inner one. The cylinder was tapped repeatedly until the center mould broke up and was removed, leaving the rough-cast cylinder. the red liquid was some form of steel. The top and bottom covers of the cylinders were cast by a similar method and appeared to be made of the same material as the cylinders. the pipes were cast. assembly was temporarily stopped, as they were waiting for the delivery of pipes, which were made at the Tula plant.

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15. the location of the Tula plant marked with a red cross on the map of the town (Appendix A). the plant lay between the railroad station and the Upa River. It was about five kms away from his accommodation in the town of Tula,

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16. the Bryansk factory was close to the Bryansk railroad station. there were airfields near both the Tula and Bryansk factories

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17. Neither the Tula nor the Bryansk factory looked newly constructed. some buildings had been renovated and that new machinery had been installed.

18. Personalities at the Priborov plant are as follows:

50X1-HUM

Viktor Ivanovich Sergeyev - section chief of the cylinder processing shop.

Mitrofanov (fnu) - chief engineer of the secret processing shop.

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Andrej Ivanovich (fnu) - foreman of the processing shop.

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Comment: the plant lay five kms north of Tula beside the road to Moscow.

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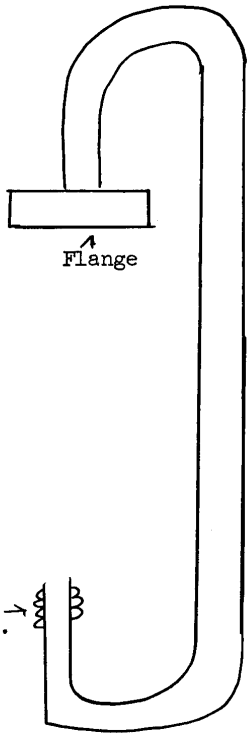
Sketch of Pipe Component



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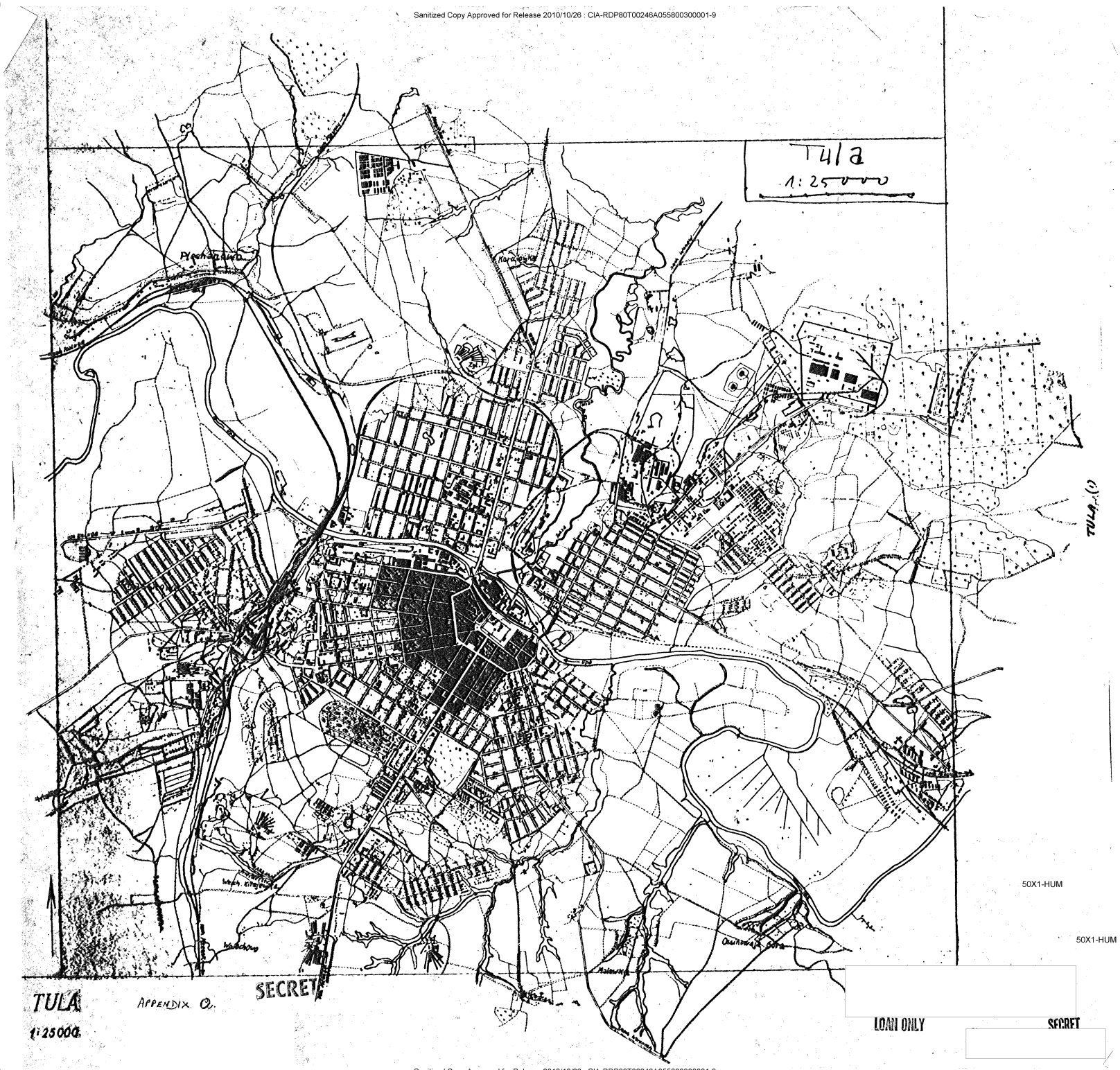

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TULA

1:25000

APPENDIX C.

SECRET

LOAN ONLY

SECRET

INFORMATION REPORT INFORMATION REPORT

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19. [redacted]

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[redacted]

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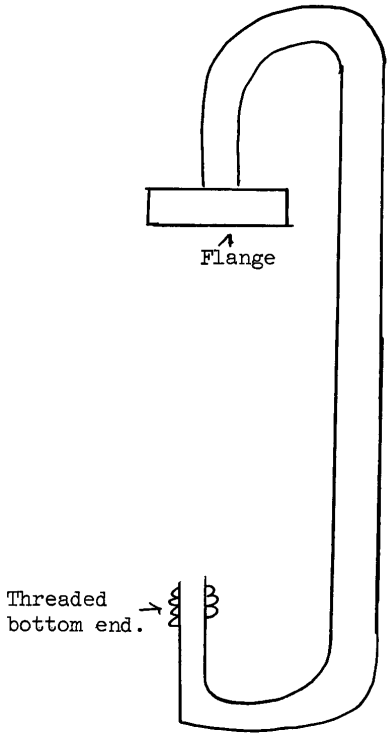
Sketch of Pipe Component



[redacted]

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